Distributed Security Architectures

Fourth Quarter 2003 Progress Report

Covers work done July through September, 2003.

Personnel:

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Akenti Server

Finished the design of the check policy message protocol and implemented it in the client/server library.

Akenti Policy Engine

Finished debugging the Akenti-Globus job manager integration. Released a version of the Akenti callout module and a compatible version of the Akenti libraries to PPPL.

Certificate Generators

The generators now run with either JKD1.4.2 or JDK1.3. The implementation of one of the file-browser classes changed between 1.3 and 1.4, so that it no longer supports generic URLs. As a result our file-browser code needs to be changed.

Designed a Check Policy GUI that will collect and verify all the policy and use conditions for a resource. It is intended for the use of stakeholders as a way to verify that all the policy they have created for a resource is correctly formatted, consistent and still valid.

Code Distribution

The distribution was updated to include the new Akenti server soap code and the Akenti-Globus callout module.

Collaboration with Other Projects

Implementation of the C++ security shared library continued. This library will facilitate sharing of high quality implementations of commonly used security functions among the Secure and Reliable Group Communication project, the Peer to Peer File Sharing (SciShare) project and Akenti.

Work continued on designing authorization policy for the SciShare project. This is a peer-to-peer information sharing system, that shares both information in the form of files and metadata about the files. We began the design and implementation of a Java policy engine. So far this is a simplified version that only supports features needed by the SciShare, which needs to permit or deny read and write access to the files and metadata. Currently this policy is being determined by group membership.